ZOOLOGICAL SOCIETY.

February 14, 1854.—Dr. Gray, Vice-President, in the Chair.

Notes on the Habits of Indian Birds. Part II. By Lieutenant Burgess.

. Family Strigidæ. Genus Urrua, Hodgs.

URRUA BENGALENSIS.

I have found this large Owl common on the banks of the large rivers, as also amongst the low jungly hills and patches of brushwood in the Central Deccan. It appears to prefer the small bushy ravines covered with high grass, which lead down from the high banks into the beds of the larger streams and rivers. When seated on the top of a bush in the dim twilight, it forms quite a formidable object, the gloom making it appear larger than it really is. does not appear to be strictly nocturnal, as I met with one sitting on the sandy shore of the river Bheema some time after the sun had I never found the eggs of this bird; but I have been informed, on good authority, that they make their nest at the foot of bushes in the tall grass, and lay four white eggs. I kept three nestlings of this species for some time. When brought to me out of the nest, they were covered with down of a chestnut colour, spotted and streaked with dark brown. This Owl breeds during the months of March and April.

Genus Noctua.

NOCTUA INDICA, Frank.

This is a very common Owl in Western India, so much so that every grove, and almost every large tree, appears to have some of this clamorous family inhabiting its holes and crevices. It is a most noisy bird, screeching and screaming ere the shades of evening draw on, and becoming quite a nuisance to any one pitched under the tree frequented by them. It appears to be very little incommoded by a strong light, moving out of its hiding-place before the sun is down, flitting backwards and forwards amongst the branches and from tree to tree. In the month of June I saw a pair of these little Owls sitting on the bare branch of a tree, with the brilliant morning sun shining full on them; in fact, they appeared to be sunning themselves. On another occasion I shot a pair, sitting on a ledge of rock, in the full blaze of the setting sun. If disturbed during the day, they fly about with the greatest activity, uttering their squabbling note, and look down on the intruder from above with eyes that appear in no way incommoded by the light. In the stomachs of the last pair above mentioned, I found the wing-cases and legs of beetles. This little owl breeds during the months of February and March, laying three or four eggs of a pure white colour, nearly $1\frac{3}{10}$ in. long and $1\frac{1}{10}$ in. broad. They lay their eggs in holes of trees.

Order II. Insessores.

Tribe Dentirostres.

Family Laniadæ.

Subfamily Laniana.

Genus Lanius.

LANIUS HARDWICKII.

This handsome little Shrike migrates, I believe, from the Deccan for the purpose of breeding, probably resorting to the thickets and ravines of the Western Ghauts, and returning to the Deccan about September. I could not find its nest when on the hills in the month of October; but I shot a young bird, which may probably be the young of this species. I give a description of its plumage. Beak rich deep brown; chin and throat dirty brownish-white; under plumage and under tail-coverts white; flanks dull grey; white streak passing from the beak over the eye and ear-coverts; ear-coverts and patch behind the eye dull black; top of the head and nape of the neck brownish-grey, the feathers having very pale whitish ferruginous tips; feathers on the lower part of the neck and back are on their basal half grey, and the remaining portion greyish-brown with light tips. On the lower part of the back the feathers are very filmy and thick-set, of a grey colour, with a dark band near their ends, and tipped with white. Primaries hair-brown; bastard wing brown; greater coverts lighter brown with pale tips; secondaries hair-brown; tertials paler brown, with light edges. Tail consists of twelve feathers; the two outer are white, with pale brown near the ends on the outer webs. The next feather has also a dark spot near the tip on the inner web; the third feather is nearly black, with a white spot on the inner web about half an inch from the end; the remaining feathers are of a black-brown, being nearly black on the inner webs; lesser coverts pale brown with light tips; feathers on the thighs of a pale grey-brown with white tips; legs and feet lead-colour; claws pale brown; the legs and claws have a white powdered look in several places, especially near the junction of the scales. This may perhaps have been the young bird of the large rufous-backed Shrike, Lanius erythronotus.

LANIUS EXCUBITOR. LARGE GREY SHRIKE.

This is very common in the Deccan. It is generally seen seated on the top of small babool trees, or other thorny bushes, in open country, and may be distinguished at some distance by its silvery-white breast. When disturbed, it flies low to some neighbouring bush, on the top of which it alights, uttering its harsh and grating cry. The Grey Shrike begins to breed as early as January, as a boy brought me a pair of nearly fledged young ones on the 2nd of February. They almost, if not invariably build in a thorn bush, and generally well into the centre. I subjoin a note penned at the time of finding one of their nests:—"15th May. Saw a pair of Grey Shrikes building

in a place I never saw this species building in before, viz. on the outside branches of the babool tree. The nest was composed of a thorny twig or two of babool and thick bents of grass." Another nest was made in a thorny bush, about 5 feet from the ground, and close to the stem of the bush; it was composed of twigs of the thorn bush, pieces of cotton and a piece of rag, with grass interwoven into it. This nest contained three eggs. It is now in the Museum of the Zoological Society. The eggs are a little less than an inch in length, by a little less than $\frac{8}{10}$ in. wide, of a white ground, spotted and mottled, especially at the large end, with grey and red-brown.

I believe that this Butcher Bird, like the last-mentioned, migrates from the Deccan during the monsoon, returning about September. It would form a very interesting subject for investigation, as to what families of birds leave the Deccan during the monsoon, whither they betake themselves, and for what purposes. I have frequently made inquiries, but could not learn anything satisfactory on the subject.

Subfamily DICRURINÆ.

Genus DICRURUS.

DICRURUS MACROCERCUS. DRONGO SHRIKE.

This bird is not much indebted to variety or richness of colouring in its plumage, for bringing it into notice; but its pleasant cheerful note and active habits must have been remarked by all observers of nature in India. Ere the peep of day it commences its pleasant twitter, and from sunrise to sunset it may be seen, now sitting on a bare spray watching for some passing insect, now perched on the back of a browsing cow or sheep, and then off in an instant in pursuit of a fly. I have seen one chase and capture a large white butterfly, which it appeared to have some difficulty in swallowing when caught, as it did not attempt to pull it to pieces, but was endeavouring to bolt it entire. They appear to have great antipathy to crows, chasing them with great vigour and boldness whenever one enters within their domain. I subjoin a note, made at the time, of the curious flight of these birds when hawking after flies. "Saw one of them (Drongo) perched on the outside branch of a tree hanging over a field of wheat; suddenly the Shrike descended close to the ears of corn on which the flies had settled in the heat of the sun, and commenced a most curious jerking flight up and down, as if it had been tossed up and down on the waves of the sea. After performing this dancing flight for some little time, it returned to its seat, and after remaining there a short time, descended and repeated its jerking flight." The Marahta name is Kolsa, the word for charcoal, alluding I suppose to its jet-black colour. The Drongo begins to build in the month of May, and Dr. Jerdon mentions having found its nest as late as August. I found its nest in a bush in a thick hedgerow; it was composed of roots, and contained three eggs of a rather reddish creamy-white ground, spotted with red spots; the egg is $\frac{9}{10}$ in. long by rather more than $\frac{7}{10}$ broad. The food of the Drongo consists of insects, moths, and butterflies.

Genus PHENICORNIS, Swains.

PHŒNICORNIS PEREGRINUS, Vig.

I have not met with the nest and eggs of the small red bird, but I believe the description given below is that of a young bird soon after it had left the nest. "18th September 1849. Whole of the upper plumage olive-green, mottled about the head with pale yellow, a large spot of which is behind the eye; tips of the lesser wing-coverts pale. Primaries and secondaries dark, with pale edges; breast and belly pale whitish-yellow, with yellow streaks; legs and feet pale lead-colour; claws soft, as also the edges of the beak."

Genus IORA.

IORA TIPHIA.

I have never met with the nest or eggs of this handsome little bird; but Dr. Jerdon, in his Catalogue of Indian Birds, says, "I once, on the west coast, in the month of September, met with a nest of this species in the fork of a low tree; it was more neatly and carefully made than any other of the few nests I have seen in this country. It contained young ones." The Iora has a most wonderful power of voice. At one moment it is heard uttering a low plaintive cry, at the next a shrill whistle; no one could have believed the notes to have issued from the same throat. On the 29th of August, 1849, I shot a female. The eggs in the ovaries were very large. The gizzard contained the remains of a curious green insect, partly covered with black hair. The tongue of this bird is furnished with two long muscles, as in the woodpecker.

Genus Hæmatornis.

HÆMATORNIS CAFER. COMMON BULBUL.

This sprightly and truly Indian bird breeds during the months of August and September. The first time that I noticed them building in August was on the 11th, and I found a nest with one fresh-laid egg on the 25th of September. They build in thick bushes in gardens. I found two nests in my garden at Ahmednuggur, one built in a guava tree, and the other in a mass of creepers. The nest is composed of fine twigs, bound together here and there with cobwebs, and lined with fibres. The nest I send is lined with the fibre of the cocoa-nut picked off a cocoa-fibre mat. I observed the old birds picking at the mat when it was put out of doors. I do not know the number of eggs which their nest generally contains. The egg is $\frac{9}{10}$ in. in length by a little more than $\frac{6}{10}$ wide, of a rich madder colour, spotted and blotched with grey and madder-brown. The only egg which I possessed is unfortunately broken; but a drawing in my possession, most accurately painted by my sister-in-law, Miss Gardiner, gives it very correctly.

February 28, 1854.—Dr. Gray, Vice-President, in the Chair.

DESCRIPTIONS OF SOME NEW AND LITTLE-KNOWN SPECIES OF BIRDS FROM NORTHERN INDIA, CONTAINED IN THE MUSEUM OF THE HON. EAST INDIA COMPANY. BY FREDERIC MOORE, ASSIST. HON. COMP. MUSEUM.

Fam. Merulidæ, Vigors.
Subfam. Myiotherina, Swains.
Genus Pnoëpyga, Hodgs.
Syn. Microura, Gould (nec Ehrenb.).

1. PNOËPYGA LONGICAUDATA, nobis.

Colour of the upper parts deep olive-brown, the feathers slightly margined with black, and having blackish shafts; wings and tail inclined to ferruginous brown; upper tail-coverts long; throat whitish; breast and sides of abdomen pale dusky ferruginous, the feathers having pale centres and blackish margins; centre of lower part of breast and abdomen white; flanks the same as the back; vent and under tail-coverts dark ferruginous; bill dark horn colour, legs paler.

Length, $4\frac{1}{2}$ inches; of wing, 2; the tail is rounded, the central feathers being $2\frac{1}{4}$ inches long, and the outer $1\frac{1}{2}$ inch; bill to front, through the feathers, $\frac{1}{2}$ inch; to gape, $\frac{6}{10}$; tarse, $\frac{8}{10}$.

Hab. N. India.

Genus Brachypteryx, Horsfield, p. s. d.

2. Brachypteryx nipalensis, Hodgson.

Male: colour above a greyish cyaneous, or light greyish blue, as are also the cheeks, sides of breast and flanks, and paling to greyish white on the centre of the breast; throat, middle of belly, vent and under tail-coverts, streak over but not extending beyond the eye, white. Female: ferruginous brown above, paling on the sides; throat, breast, belly, under tail-coverts and streak over the eye, whitish, the feathers on the breast and sides fringed with brown; bill dark horn colour, legs paler.

Length, $4\frac{1}{4}$ inches; of wing, $2\frac{1}{2}$; tail, $1\frac{3}{8}$; bill to gape, $\frac{6}{8}$; tarse, 1.

Hab. Nepal (No. 943, Hodgs. Catal.).

This species is allied to Br. cruralis, Blyth, but may readily be distinguished by its smaller size, shorter tail, paler colour of the upper parts, and by its white throat and belly.

Genus Callene, Blyth, Journ. A. S. Beng. p. 136 (1847). Syn. *Cinclidium*, Blyth (nec Gould).

Gen. Char. "Bill shorter than the head, straight, slender, higher than broad, the ridge of the upper mandible tolerably acute, and its tip very slightly emarginated; inferior gonys ascending for the terminal half, imparting to the bill the appearance of a tendency to bend upward: naral apertures in the form of elongate-oval fissures in the lateral nasal membrane, and partially impended by the short semi-Ann. & Mag. N. Hist. Ser. 2. Vol. xvi.

reflected frontal feathers; gape armed with a few small setæ; wings and tail rounded, the 4th, 5th and 6th primaries equal and longest; legs and toes slender, the tarsi smooth, unscutellate, and very long, as is also the middle toe; claws but moderately curved, and of little more than mean length; plumage light, soft and full, having a scale-like appearance on the crown, breast and belly."

3. CALLENE FRONTALE, Blyth.

Syn. Cinclidium frontale, Blyth, Journ. A. S. Beng. xi. p. 181, xii. p. 954. t. p. 1010. Bonap. C. G. Av. p. 301.

Callene frontale, Blyth, Journ. A. S. Beng. xvi. p. 136; Catal. B.

Mus. A. S. Beng. p. 178.

Ruticilla frontalis, G. R. Gray, Gen. of Birds, i. p. 180.

Brachypteryx scapularis, Horsf. MS. Hab. Nepal (No. 950, Hodgs. Catal.).

Spec. Char. "Plumage dark fusco-cyaneous, the rump dusky; flanks somewhat ashy, and middle of the belly slightly grey-edged; lores and immediately above the beak blackish, contrasting with a bright cærulean forehead; bend of the wing also cærulean, but less bright; and winglet, primaries and their coverts, secondaries and tertiaries, dark olive-brown; a white spot on the under surface of the wing, beneath the winglet; bill black; legs dusky brown.

"Length, $7\frac{5}{8}$ inches; of wing from bend, $3\frac{3}{8}$; middle tail-feathers, $3\frac{1}{2}$, the outermost $\frac{3}{4}$ of an inch shorter; bill to forehead nearly $\frac{5}{8}$, to gape $\frac{1}{16}$; tarse, $1\frac{3}{8}$; middle toe and claw, $1\frac{3}{16}$; hind toe and claw, $\frac{3}{4}$;

the last, $\frac{3}{8}$.

"This bird is reported to be a fine songster, and heard chiefly in the evening."—Blyth.

Subfam. TIMALINA.

Genus Trichastoma, Blyth.

Syn. Malacocincla, Blyth.

Gen. Char. "Bill as long as the head, rather stout, high, much compressed, the tip of the upper mandible pretty strongly hooked, but indistinctly emarginated, and its ridge obtusely angulated towards the base, the remainder scarcely angulated; gape but little widened, and feebly bristled; nostrils large and subovate, with oval aperture to the front, a little removed from the base of the bill; tarse of mean length and strength, as long as the middle toe with its claw; the claws suited for perching, compressed, and moderately curved, that of the hind toe rather large; wings moderate, with the first primary reaching to about their middle, the second much shorter than the third, and the fourth longest; tail rather short, weak and even, except that its outermost feathers are a little shorter than the rest; plumage full and lax, the coronal feathers somewhat elongated and of a spatulate form."

4. TRICHASTOMA ABBOTTI, Blyth.

Syn. Malacocinela Abbotti, Blyth, Journ. A. S. Beng. xiv. p. 601 (1845).

Trichastoma Abbotti, Blyth, J. A. S. Beng. xvi. p. 462; Catal. B. Mus. A. S. Beng. p. 147. Bonap. C. G. Av. p. 259.

Malacopteron Abbotti, G. R. Gray, Gen. of Birds, iii. App. p. 9.

Hab. Arracan (No. 919, Hodgs. Catal.),

Spec. Char. "Colour above plain olive-brown, tinged with rufous on the rump and tail; the upper tail-coverts ferruginous brown, under parts paler; the throat and middle of the belly white; the earcoverts, sides of the breast and flanks rufescent; the lower tail-coverts weak ferruginous; bill horn-colour, paler beneath.

"Length, 6 inches; of wing, 3; tail, $2\frac{1}{8}$; bill to gape, $\frac{11}{18}$; and tarse

the same."-Blyth.

Mr. Blyth states Arracan to be the habitat of this bird. Specimens have lately been presented to the Company's Museum by B. H. Hodgson, Esq., from Nepal, and by Capt. R. C. Tytler from Dacca.

> Fam. SYLVIADÆ, Vigors. Subfam. SAXICOLINA, Vigors. Genus NEMURA, Hodgson. Syn. Ianthia, Blyth.

5. NEMURA HODGSONI, nobis.

Male: colour of the upper parts purplish blue, brightening to vivid ultramarine on the crown; forehead, lores and sides of head, wings and tail black, the two latter margined with blue externally; on the rump some of the feathers are tipped with white; upper tail-coverts blue; lower parts yellowish ferruginous; under wing-coverts, flanks and under tail-coverts white. Female: ferruginous brown, richer on the rump; wings and tail dusky, margined with ferruginous brown externally; lores, ear-coverts and under parts pale dusky ferruginous; under tail-coverts white; bill black; legs pale horn colour.

Length, $3\frac{3}{8}$ ths of an inch; wing, $3\frac{7}{8}$; tail, $1\frac{1}{4}$; bill to front, $\frac{2}{8}$;

to gape, $\frac{3\frac{1}{2}}{8}$; tarse, $\frac{1}{2}$ an inch.

Hab. Nepal (No. 949, Hodgs. Catal.).

Subfam. PHILOMELINA, Swains.

Genus Tarsiger, Hodgson.

6. Tarsiger superciliaris, Hodgson.

Male: above deep cyaneous; wings brown, margined with cyaneous and rufous on the shoulder, primaries also margined with rufous, secondaries with cyaneous; tail brown, margined with cyaneous; a white superciliary streak extending one inch and a half from the nares to the back of the neck; lores and cheeks black; beneath rufous; centre of belly white. Female: olive-brown above; wings and tail brown, margined with rusty olive; superciliary streak not so clear as in the male; beneath pale dull rufous; centre of belly and shafts of the underside of tail white; bill black; legs horn colour. Length, $5\frac{1}{2}$ inches; of wing, $3\frac{2}{8}$; tail, $2\frac{5}{8}$; bill to gape, $\frac{5}{8}$; tarse, $1\frac{1}{8}$.

Hab. Nepal (No. 924, Hodgs. Catal.).

Subfam. SYLVIANA, Vigors.

Genus Prinia, Horsfield, p. s. d.

7. PRINIA CINEREOCAPILLA, Hodgson.

Crown of the head grey, the shaft and margin of the feathers being darker; naral and frontal plumes, a streak over and beyond the eye, and the whole under parts rufescent, brightest on the flanks and thighs; lores and upper part of ear-coverts greyish; nape, back, rump and wings bright rufous brown, the tips of the latter dusky; tail the same colour as the back, paler beneath, with a terminal dusky band and rufescent white tips; bill black; legs pale horn colour.

Length, $4\frac{1}{4}$ inches; wing, $1\frac{8}{12}$; tail, 2; bill to front, $\frac{3}{8}$; to gape, $\frac{5}{8}$;

tarsus, $\frac{3}{4}$; middle toe and claw, $\frac{7}{12}$; hind ditto, $\frac{6}{12}$. Hab. Nepal (No. 890*, Hodgs. Catal.).

Genus Suya, Hodgson.

8. SUYA ATROGULARIS, nobis.

Colour above dusky brown, in some specimens ashy brown; edge of wing at shoulder and under wing-coverts buff; primaries margined with buffish and secondaries with rufescent brown; a whitish streak extending from the base of the lower mandible to the end and under the ear-covert; chin, throat, side of neck, breast and centre of abdomen black, the feathers of the two latter broadly centred with white; flanks and sides of abdomen mixed grey, brown and rufescent; vent buff; thighs buffy rufous; tail paler than the back, and has no perceptible terminal band; bill horn colour, feet paler.

Length, $6\frac{1}{2}$ inches, including the tail; wings, from $1\frac{3}{4}$ to 2 inches in some specimens; central feathers of tail from $3\frac{1}{2}$ to 4, its outermost being only 1 inch; bill to gape, $\frac{8}{12}$; to front, $\frac{5}{12}$; height from chin to

front, $\frac{1}{10}$; width at chin, $\frac{2}{10}$; tarsi, $\frac{7}{8}$.

Hab. Darjeeling; Nepal (No. 893, Hodgs. Catal.).

A single specimen of this beautiful bird has been in the Museum of the East India Company for a number of years, collected in Darjeeling by F. T. Pearson, Esq.; and B. H. Hodgson, Esq., has brought home several examples from Nepal.

Genus Drymoica, Swains. p. s. d.

9. DRYMOICA NIPALENSIS, Hodgson.

Above rufous brown; wings dusky brown, the primaries exteriorly and secondaries interiorly and exteriorly margined with bright rufous brown; tail rufous brown, paler beneath, and distinctly rayed, has a terminal dusky band, the tips being pale but not white; the whole under parts rufescent, as in *Prinia socialis*, Sykes; bill dusky horn colour, paler below at base; legs pale horn colour.

Length, $4\frac{1}{2}$ to 5 inches; wing, $1\frac{10}{12}$; tail varying from $2\frac{1}{2}$ to 3 bill to front, $\frac{4}{12}$; to gape, $\frac{7}{12}$; tarsi, $\frac{10}{12}$; middle toe and claw, $\frac{8}{12}$

hind ditto, $\frac{7}{12}$.

Hab. Nepal (No. 913, Hodgs. Catal.).